LYMPHOSARCOMA WITH OVARIAN INVOLVEMENT IN
A CHILD

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Generalized lymphosarcoma with ovarian involvement in a child is a rare condition. The following case was proved by biopsy and autopsy.

CASE REPORT

D. S., a girl of seven years, was admitted June 5, 1931, with a marked swelling in the right neck and over the angle of the jaw. She had been ill for six weeks. The tumor had been treated by poultices, but had increased in size and caused considerable pain. The diagnosis on admission was cervical adenitis. Physical examination showed considerable emaciation, and a mass over jaw and in the right neck measuring 8 cm. in diameter. Enlarged nodes were not felt in the right neck, but there were hard nodules in both groins, and above the right nipple was a mass about 2 cm. in diameter. A large, hard, smooth mass was felt in the left lower quadrant of the abdomen. Examination of the urine showed a trace of albumin and a good many pus cells, some in clumps. The blood count was 17,500 white cells, 83 per cent polymorphonuclears, 75 per cent hemoglobin, and 3,930,000 red cells.

Fig. 1. Photomicrograph of Biopsy Specimen from Cervical Node
On the day following admission incision of the cervical mass for drainage was made. Some pus was evacuated and solid portions of the mass were sent to the laboratory for histologic study. The child experienced but slight relief, and after a few days complained of generalized pain, which was most marked in the back and in the left side. She suffered a great deal, and died in convulsions on July 7.

The specimen removed from the neck tumor showed many pus cells, necrosis, and unmistakable lymphosarcoma. Mitotic figures were abundant. The cells were large and showed marked condensation of nuclear material. The stroma was slight.

Autopsy: The body was emaciated. There were about 100 c.c. of clear serous fluid in the peritoneal cavity. The large mass in the abdomen was found to be the left ovary, measuring 11 by 6 by 5 cm. The left tube was thickened, hard, and nearly 2 cm. in diameter at some points. The right ovary was much smaller than the left, but was also enlarged, measuring 7 by 3 by 3 cm. The body of the uterus was quite small and not involved. The intestines were externally smooth and glistening; but through the wall at various points metastatic infiltrations were seen. The mesenteric nodes were generally involved. The spleen was normal. The stomach was moderately distended. The pancreas was involved throughout, the head containing a large mass of new growth. The liver was pale in color, and contained no metastases. The left kidney, which was quite red and congested, weighed 75 gm., and showed no
evidence of involvement by the tumor process. The right kidney was considerably smaller, weighed 50 gm., and contained one nodule 2 cm. in diameter. Above the brim of the pelvis was a large necrotic and friable mass of paravertebral nodes about 10 cm. in diameter. The lungs were pink in color, and crepitant throughout. Neither lung contained nodules of new growth. The mediastinum, pericardium, and heart were negative.

Microscopic sections of ovaries, pancreas, bowel wall, kidney, and abdominal nodes showed the same picture of lymphosarcoma as was seen in the biopsy specimen from the cervical lesion.

**Fig. 3. Section of Left Ovary**

**Discussion**

Lymphosarcoma is not infrequent in children. Pirquet's study of the English mortality statistics showed that of 5,281 cases of lymphogranuloma 18 per cent occurred in children under fifteen years of age. Among 390 cases of lymphosarcoma in the records of the Memorial Hospital, Pack and LeFevre found that 4 per cent of the cases occurred in patients under fifteen.

While lymphosarcoma metastasizes widely, involving most frequently the lymph nodes and gastro-intestinal tract, involvement of the ovary has been noted in but a few instances. The reports of autopsied cases by MacCallum, by Ghon and Roman, and by Symmers include a total of 50 cases. Among these there were twelve women, in two of whom the ovary was found to be involved. These two women were fifty-five and forty-four years of
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age, respectively. Kundrat's study of lymphosarcoma, which established the disease as an entity and described its clinical and pathological features, was based upon fifty autopsied cases. Kundrat did not mention ovarian involvement. Among 1,062 surgical and biopsy specimens of lymphosarcoma and Hodgkin's disease studied by MacCarty there were none from the ovary. A search of the reported cases has revealed no instance of ovarian involvement by lymphosarcoma in a child.

BIBLIOGRAPHY


